README:

We are using python3.10

When we extract the folder in a given location then there will be one folder called code will we formed in that code folder there will be another folder called multiAgents where all the codes will be present.

While running these commands we have to make sure that the pwd is in search folder.

And we must have tkinter on our system to run graphis.

To run all the questions at once we can run the command:

python3 autograder.py

It can be run for one particular question, such as q2, by:

python3 autograder.py -q q2

To run it without graphics, use (example q2):

python autograder.py -q q2 --no-graphics

Q1:

To implement ReflexAgent in the testClassic layout:

python pacman.py -p ReflexAgent -l testClassic

We can try out our reflex agent on the default mediumClassic layout with one ghost or two (and animation off to speed up the display):

python3 pacman.py --frameTime 0 -p ReflexAgent -k 1: for one ghost

python3 pacman.py --frameTime 0 -p ReflexAgent -k 2: for two ghosts

Q2:

To implement depth 4 on minimaxClassic layout using MinimaxAgent:

python3 pacman.py -p MinimaxAgent -l minimaxClassic -a depth=4

Q3:

To implement depth 3 on smallClassic layout using AlphaBetaAgent:

python3 pacman.py - p AlphaBetaAgent -a depth=3 -l smallClassic

To test and debug your code, run: python3 autograder.py -q q3

To run it without graphics, use: python3 autograder.py -q q3 --no-graphics

Q4:

You can debug your implementation on small the game trees using the command:

python3 autograder.py -q q4

To see how the ExpectimaxAgent behaves in Pacman, run:

python3 pacman.py -p ExpectimaxAgent -l minimaxClassic -a depth=3

To implement depth 3 on trappedClassic layout using AlphaBetaAgent 10 times in a row without graphics:

python3 pacman.py -p AlphaBetaAgent -l trappedClassic -a depth=3 -q - n 10

To implement depth 3 on trappedClassic layout using ExpectimaxAgent 10 times in a row without graphics:

python3 pacman.py -p ExpectimaxAgent -l trappedClassic -a depth=3 -q -n 10

Q5:

To run only the question 5 in autograder with graphics:

python3 autograder.py -q q5

To run only the question 5 in autograder without graphics:

python3 autograder.py -q q5 -- no-graphics